

Restaurant location recommender system in United States of America



Introduction:

Problem Background:

United States of America is fourth largest country in the world. Russia being the largest. Millions of Tourists come here to visit this beautiful country from all over the world. Pizza is one of the most famous dishes from around the world. People no matter where they belong from, they enjoy this food wherever they go to. Being of such an enormous size, it is difficult to find the best pizza place nearby. So we shall focus on Larger cities only for this capstone project. USA has a population of 328 million with most of it being concentrated in major cities.

Problem Description:

People travel daily from their houses to work, travel up to 10 kms is considered normal in this city either by a vehicle or public transport. Travel takes times and hence food is the area which has be compromised upon. Hence the owner of ABC company has decided to start a recommender system for pizza in multiple cities based on their ratings available from foursquare. Pizza is a quick snack that can fill you up very fast. This recommender system can be used my many people around the country in famous cities. Just for this project I am concentrating on pizza but can be used for multiple things. So, there are a few things that should be considered.

1. Number of restaurants in that area.
2. The ones with good rating.
3. Number of similar restaurants (pizza parlours) available near to me.
4. Average cost of the similar restaurants.

To help with this problem a recommender system is to get answer to the questions the manager of the ABC company is looking for.

Target Audience:

This is for people who travel a lot. People who work around the area and can come over during lunch break. This is also for people who are new to the area and looking for a quick snack. It is also for investors who are looking to invest in multiple areas and multiple properties. Finally, it is for everyone who is interested in trying something new.

Data

City data of the following will be selected:

- New York
- San Francisco
- Jersey City
- Boston
- Chicago

Latitude and Longitude coordinates of those neighborhoods. It is required to plot the data on the map.

Venue data about other restaurants taken from Foursquare.

Sources of Data

- We shall use foursquare data for all the cities and grab information from that.
- Then we shall get the coordinates of the same location using Python Geocoder Package.
- After that we shall use Foursquare API to get the venue location.